

## INDEX TO VOLUME 128

Lack of space makes it impossible to give many cross-references, or to enter a given reference in more than one place. Each article is therefore entered where it is believed it will be most easily found. In every case the general subject should be sought, rather than the supposed specific title of an article; the article may not be indexed under its specific title at all, but may be entered under a statement of what it is about, so that it may be more readily found by one seeking references to its subject matter. We call special attention to the classifications "Household Appliances," "Machines and Machine Tools," "Machines for Special Purposes," "Tools," etc., under which many items will be found whose location otherwise would be very puzzling. These groups may be examined item by item for a doubtful entry with much greater ease than can the entire alphabet. The individual articles on the chemistry and motor truck pages are indexed separately; the short notes comprising the columns of text on the advertising pages appear only under their column headings. The asterisk (\*) indicates that the article in question is illustrated.

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## Advantages and Disadvantages of the Concrete House

IN a recent number of *Concrete*, Mr. J. C. Pearson, Chief of Cement Section, United States Bureau of Standards, discusses the advantages and disadvantages of the all-concrete house, by which he means a house that has its structural walls, floors and main bearing partitions of concrete, regardless of other materials which may be used in the exterior or interior finish. The outstanding advantages of such a house are stated to be as follows:

1. It is more sanitary than any other type, affording less opportunity for vermin to find thoroughfare or breeding and hiding places.
2. It is a very fire-resistant type of construction.
3. Its maintenance and depreciation are low.
4. It is of maximum stability and rigidity. These advantages are fairly self-evident. No comment is necessary on the first, nor on the second, other than to mention the regrettable fact that people are so indifferent to fire risk. Fire-resistant construction in dwelling houses is inseparably a part of the new order of building; in the all-concrete house there is the highest degree of fire resistance.

It is fairly well established that a proper maintenance and depreciation allowance for frame houses is about 5 per cent per annum of the total cost. An all-concrete house, we are led to believe, can be built at a cost not greater than 15 to 20 per cent above that of a frame house on substantially the same

plans, and the maintenance and depreciation allowance on this type is estimated at about 2.5 per cent.

The fourth argument for the concrete house, maximum rigidity and stability, is a most important one, for these are the qualities upon which low maintenance and depreciation depend. Rigidity and stability of the frame do more than this, however, for they not only tend to preserve the house in its original condition, but they save the house owner and housekeeper from continual worry about the unsightly appearance of cracks in the plastering, the separation of baseboards from floors, the annoyance of sticking and non-latching doors, sags and humps in floors, and other ills of like nature.

The arguments against the concrete house are stated as follows:

1. Prevalence of opinion that the concrete house is likely to be cold, damp or unattractive in appearance.
2. Higher first cost.
3. Building code restrictions.
4. Lack of builders who are interested or experienced in this type of construction.

The first of these objections is valid only to the extent that one may be unfavorably impressed by certain existing examples of concrete housing.

The second of these objections, higher first cost, is unfortunately too often the deciding factor in the building or purchase of a home. It has been shown, however, that the additional expense entailed in building a concrete house is a wise investment, as it means a saving in the end and always carries advantages in the nature of a direct return. The

higher first cost is not, therefore, a valid argument against the concrete house, for it is the justifiably higher price of a better product.

## One-Eyed Jobs

IN many occupations it is necessary for the workman to make use of a magnifying glass, if not during the whole time, at least when engaged upon the more delicate portions of the work. Most of the lenses employed are single, so that these jobs are said to be "one-eyed" jobs. The one-lens magnifying glass employed is called a "micros." The result of this constant use of one eye alone has been studied by Dr. E. Berger of Berne, Switzerland.

Writing in a recent issue of *Natur und Technik* he says that the natural supposition would be that only the eye employed at the lens would suffer from such work. However, it has quite recently been established that it is the other eye which is injured the most by this one-sided work, so that eventually even when both eyes are used the retina of the usually idle eye fails to respond, which is attributed to a sort of psychological influence. In fact the unused eye may even become crossed. This is especially the case when the unused eye is kept open.

Swiss watchmakers are in the habit of trying to avoid these evil effects of the use of one eye by exercising the eyes with a stereoscope. Dr. Berger has constructed a binocular lens to be employed in such crafts which it is hoped will enable workmen whose eyes have not already been injured to keep them in good condition.



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